



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,739	07/28/2003	Woo-Jin Kim	50567/DBP/Y35	4038

23363 7590 11/29/2005
CHRISTIE, PARKER & HALE, LLP
PO BOX 7068
PASADENA, CA 91109-7068

EXAMINER

CHOW, DOON Y

ART UNIT PAPER NUMBER

2677

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/628,739	Applicant(s) KIM ET AL.	
	Examiner Dennis-Doon Chow	Art Unit 2677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/2/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Double Patenting

1. Claims 1-13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 10/947331. Although the conflicting claims are not identical, they are not patentably distinct from each other because the present claimed invention is a broader version of the patented claimed invention. The following is an example for comparing claim 1 of the present application and claim 1 of the patent.

Claim 1 of the present application	Claim 1 of the patent
1. An apparatus for controlling address power of a plasma display panel, the plasma display panel having pluralities of address electrodes, scan electrodes, and sustain electrodes, the scan electrodes and sustain electrodes forming pairs and being alternately disposed on the plasma display panel, the apparatus comprising: a memory for storing sustain discharging information with respect to load ratios; an address power controller responsive to an externally input video signal for calculating a sum of pixel differences between lines of the externally input video signal and for outputting video data modified by multiplying the video signal with an attenuation coefficient corresponding to the calculated sum; a video data processor for processing the modified video data; an average signal level detector for measuring a load ratio of the modified video data; and a sustain power controller for outputting sustain discharge information corresponding to a	1. An apparatus to automatically control power of address data in a plasma display panel including a plurality of address electrodes, a plurality of scan electrodes, and a plurality of sustain electrodes arranged in pairs with the scan electrodes, comprising: a memory to store sustain discharge information corresponding to a load ratio; an average signal level sensor to measure a load ratio of an externally-inputted image signal; a power controller to output sustain discharge information corresponding to a load ratio of currently-inputted data; an address power controller to calculate a sum of pixel value differences between adjacent ones of successive lines in the image signal, to determine a start gain, an end gain, and a sustain time, based on the calculated line pixel value difference sum, and to repeatedly output a gain initially corresponding to the start gain and sequentially decremented by a predetermined value from the start gain until the gain corresponds to the end

load ratio of currently input data.	gain; and an address data generator to multiply the image signal by respective gains outputted from said address power controller, and to generate address data.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwama et al. (6177914) in view of Tanaka (6680717)

Regarding to claim 10, Iwama discloses an apparatus and a method for controlling address power of a plasma addressed display panel. The plasma addressed display panel includes a plurality of address electrodes and scan electrodes. Iwama discloses the method comprising: calculating a sum of pixel differences between lines throughout an input video signal; determining an attenuation coefficient that corresponds to the calculated sum; and outputting video data modified by multiplying

Art Unit: 2677

the video signal with the attenuation coefficient (col. 6, lines 8-42; col. 8, lines 1-60).

Iwama does not explicitly disclose a plurality of sustain electrodes, and the scan electrodes and sustain electrodes forming pairs and being alternately disposed. Tanaka, in the same display field, discloses a plurality of sustain electrodes and scan electrodes, wherein the scan electrodes and sustain electrodes forming pairs and being alternately disposed (see Fig. 1). In light of Tanaka, it would have been obvious to use Tanaka's sustain electrodes in Iwama's apparatus so that display images can be enhanced.

Regarding to claim 10, Iwama further discloses transforming the modified video data signal to a data signal for gray control; classifying the data signal according to its gray scale to provide a classified data signal; and outputting the classified data signal in an order corresponding to a predetermined driving sequence (col. 5, line 48 to col. 6, lines 42).

Allowable Subject Matter

4. Claims 1-9 are allowed.
5. Claims 12-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Art Unit: 2677

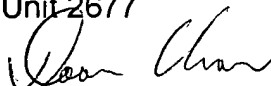
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis-Doon Chow whose telephone number is 571-272-7767. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on 571-272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Chow
November 25, 2005

Dennis-Doon Chow
Primary Examiner
Art Unit 2677


DENNIS-DOON CHOW
PRIMARY EXAMINER